

# **Notice of Allowability**

Application No.

10/061,452

Examiner

Maribel Medina

Applicant(s)

BONEBERG ET AL.

Art Unit

1754

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to paper filed on 2/4/02
  2. ☒ The allowed claim(s) is/are 1-24
  3. ☒ The drawings filed on 04 February 2002 are accepted by the Examiner.
  4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
    - a) ☒ All b) ☐ Some\* c) ☐ None of the:
      1. ☒ Certified copies of the priority documents have been received.
      2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
      3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
- \* Certified copies not received: \_\_\_\_\_
5. ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78
    - (a) ☐ The translation of the foreign language provisional application has been received.
  6. ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. **THIS THREE-MONTH PERIOD IS NOT EXTENDABLE**

7. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
8. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
  - (a) ☐ Including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
    - 1) ☐ hereto or 2) ☐ to Paper No. \_\_\_\_\_
  - (b) ☐ Including changes required by the proposed drawing correction filed \_\_\_\_\_, which has been approved by the Examiner.
  - (c) ☐ Including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No. \_\_\_\_\_

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the margin according to 37 CFR 1.121(d).

9. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

## Attachment(s)

- |  |   |
|--|---|
| 1 <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                       | 5 <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)          |
| 2 <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                              | 6 <input type="checkbox"/> Interview Summary (PTO-413), Paper No. _____             |
| 3 <input checked="" type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No. _____ | 7 <input type="checkbox"/> Examiner's Amendment/Comment                             |
| 4 <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit of Biological Material           | 8 <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
|  | 9 <input type="checkbox"/> Other  |

**Notice of Allowability**

**Reasons for Allowance**

1. The following is an examiner's statement of reasons for allowance: Claims 1-24 area allowable upon consideration of the prior art.

The closest prior art is US Patent No. 6,086,839 (Autenrieth et al.). The prior art discloses a gas generating fuel system for a fuel cell system, comprising a reformer (5), a carbon monoxide oxidation stage (7); a catalytic burner (15 and 16); an evaporator (2) thermally coupled to the catalytic burner (15); and prereforming units (3 and 4) (See the Figure).

Regarding instant claims 1-7, the prior art disclose an operating method wherein the evaporator and the main reformer are heated by way of their respective catalytic burners (15 and 16) at the warm-up phase (See col. 2, lines 40-51). The prior art fails to disclose or suggest using the generated heat in the catalytic burners to heat the prereforming stages (partial reforming unit and /or partial oxidation stage) as in instant claim 1.

Regarding claims 8-13, the prior art fails to disclose or suggest "at least one of a partial reforming unit and a partial oxidation stage for starting the gas generating system, wherein the at least one of the partial reforming unit and the partial oxidation stage (prereforming stage) is thermally coupled to the at least one catalytic burner."

Regarding claims 14-20, the prior art fail to disclose or suggest "when the system is not warmed up, heating at least one of a partial reforming unit and a partial oxidation stage and using the at least one of a partial reforming unit ad a partial oxidations stage to generate a hydrogen-containing gas for the fuel cell unit using the evaporated at least one of the combustion medium

and water, and when the system is warmed up, using a reforming unit to generate a hydrogen-containing gas flow for the fuel cell unit using the evaporated at least one of a combustion medium and water, wherein the reforming unit has a higher capacity than the at least one of a partial reforming unit and a partial oxidation stage."

Regarding claims 21-24, the prior art fails to disclose or suggest "wherein the at least one of the partial reforming unit and the partial oxidation stage is thermally coupled to the at least one catalytic burner."

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

#### Conclusion

2. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. US Patent No. 5,741,474; US Patent no. 6,383,468; US Patent No. 6,383,469; and US Patent No. 6,447,736 all disclose systems for generating hydrogen to be used in a fuel cell system.

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Maribel Medina whose telephone number is (571) 272-1355. The examiner can normally be reached on Monday through Friday from 7:30 AM to 4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stanley Silverman can be reached on (571) 272-1358. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571) 272-0994.

  
STANLEY C. HENDERSON  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 1701

Maribel Medina   
Examiner  
Art Unit 1754